

Application No. 09/683,967
Docket No. A1-1423
Amendment dated October 6, 2003
Reply to Office Action of September 4, 2003

REMARKS

In the Office Action, the Examiner reviewed claims 1-53 of the above-identified US Patent Application, with the result that the claims were subjected to a restriction requirement. More particularly, the Examiner required that Applicant make an election under 35 USC §121 between claims 1-31 (Group I) drawn to a vibrating apparatus, and claims 32-53 (Group II) drawn to a lysing process. In response, Applicant provisionally elects with traverse to prosecute Group II, claims 31-53, on the merits. In doing so, Applicant respectfully traverses the restriction requirement and requests reconsideration in view of the following comments.

For the convenience of the Examiner, amended independent product claim 1 (of Group I) and independent process claim 32 (Group II) are reproduced below, with the reference numeral of each element as denoted in the specification and drawings set forth in parentheses.

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1. A micromachined lysing device (10) comprising:

a substrate (12);

a micromachined tube (14) comprising a fluid inlet (23), a fluid outlet (43), and a freestanding portion (16) between the fluid inlet (23) and the fluid outlet (43), the freestanding portion (16) being spaced apart from a surface (18) of the substrate (12);

a cell-containing fluid within the freestanding portion (16) of the tube (14); and

means (26,28) for vibrating the freestanding portion (16) of the tube (14) at a level sufficient to rupture walls of cells in the fluid within the freestanding portion (16) of the tube (14) to produce a lysed material.

32. A method of lysing a cell-containing fluid, the method comprising the steps of:

flowing the fluid through a micromachined tube (14) on a substrate (12), the tube (14) comprising a fluid inlet (23), a fluid outlet (43), and a freestanding portion (16) between the fluid inlet (23) and the fluid outlet (43), the freestanding portion (16) being spaced apart from a surface (18) of the substrate (12); and

vibrating the freestanding portion (16) of the tube (14) at a level sufficient to rupture walls of the cells in the fluid as the fluid flows through the freestanding portion (16) of the tube (14) to produce a lysed material that leaves the tube (14) through the fluid outlet (43).

The basis for requiring restriction between Groups I and II was that their subject matters are "related as process and apparatus for carrying out process." Under MPEP §806.05(e), inventions are deemed to be distinct if (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. The Examiner believes that Applicant's apparatus and process are distinct because the apparatus as claimed can be used to practice another and materially different process, citing "the

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apparatus could be used to treat materials other than cell containing fluids.”

Applicant respectfully requests reconsideration in view of the above amendments to the claims, by which the grounds for distinctiveness between the Group I product claims and the Group II process claims have been rendered moot, namely, the broadest independent product claim (claim 1) now requires the presence of a cell-containing fluid as an element of the claim. Accordingly, “the apparatus as claimed” cannot be used to practice another and materially different process, because a cell-containing fluid is required within the apparatus, and lysing necessarily results as a result of the freestanding portion of the tube vibrating at a level sufficient to rupture walls of cells in the fluid.

In view of the above, Applicant respectfully requests withdrawal of the restriction requirement between Groups I and II.

Should the Examiner have any questions with respect to any matter now of record, Applicant’s representative may be reached at (219) 462-4999.

Respectfully submitted,

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